

A. CLASSIFICATION OF SUBJECT MATTER Int.Cl ⁷ G02B6/12, H05B3/10, G02B7/00				
According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED				
Minimum documentation searched (classification system followed by classification symbols) Int.Cl ⁷ G02B6/12, H05B3/10, 7/00				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922—1996 Toroku Jitsuyo Shinan Koho 1994—2003 Kokai Jitsuyo Shinan Koho 1971—2003 Jitsuyo Shinan Toroku Koho 1996—2003				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.	
A	JP 2001-083340 A (Hitachi Ca 30 March, 2001 (30.03.01), Full text; Figs. 1 to 3 (Family: none)	ble, Ltd.),	1-14	
A	JP 2000-075152 A (The Furukaw 14 March, 2000 (14.03.00), Full text; Figs. 1 to 3 (Family: none)	va Electric Co., Ltd.),	1-14	
P,A	JP 2002-148499 A (The Furukawa Electric Co., Ltd.), 22 May, 2002 (22.05.02), Full text; Figs. 1 to 10 (Family: none)		1-14	
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Further documents are listed in the continuation of Box C. See patent family annex.				
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention cannot be considered novel or cannot be considered to involve an inventive step when the document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family "A" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention cannot be considered novel or cannot be considered novel or cannot be considered to involve an inventive step when the document is combined with one or more other such document such document member of the same patent family "A" document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention cannot be considered novel or				
25 February, 2003 (25.02.03) 11		11 March, 2003 (11.	11 March, 2003 (11.03.03)	
Name and mailing address of the ISA/ Japanese Patent Office		Authorized officer		
Facsimile No.		Telephone No.		